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A DECIDED IMPROVEMENT IN THE CONSTRUCTION OF LACHRYMAL PROBES.

BY SAMUEL THEOBALD, M. D., SURGEON TO THE BALTIMORE EYE, EAR AND THROAT CHARITY HOSPITAL.

Some months since Mr. Charles Williams, manufacturer of surgical instruments of this city, advised with me as to the advantage of substituting aluminium for silver in the construction of lachrymal probes, and at the time it was agreed that he should make some probes of this metal. He found, however, that aluminium is not capable of being soldered, and as no other method of attaching the central shield to the probe occurred to either of us at the time, the experiment was temporarily abandoned. Afterwards he suggested that, at least with the larger size probes, there would be no difficulty in attaching the shield by means of rivets. Accordingly, in October last he made me an aluminium probe in this manner, the size being numbers 15 and 16 of my series. The chief advantage which we thought the new probe would possess was lightness, which would be a desideratum in the larger size probes. I found, however, that it had another advantage, which was of still greater practical value—its surface was much smoother and

more slippery than that of the silver probes, so that it could be introduced into the nasal duct and withdrawn from it with greater ease. The difference, indeed, is so marked that patients can usually distinguish the aluminium probes from the silver ones by the less amount of pain which attends their introduction and withdrawal.

In appearance the aluminium probes closely resemble the silver ones, the former metal being of a blueish-white when contrasted with the yellow-white of the silver. They are also of about the same stiffness as the pure silver probes. The specific gravity of aluminium being but 2.56, whereas that of silver is 10.4, it will be seen that the difference in weight is about as one to four. In fact, the numbers 15 and 16 silver probes weigh about as much as the whole series of eight probes (16 sizes) would, if made of aluminium. This quality of lightness is of real advantage with the larger probes, because it facilitates delicacy of manipulation; besides, the difference in weight is appreciable to the patient.

I have become so well convinced of the advantages of the aluminium probes, that I now employ them in both hospital and private practice in preference to the silver ones. Mr. Willens[1] has found it practicable to make probes as small as numbers 7 and 8 of the new metal. For the sizes smaller than these coin silver answers better. I have also had him make me several sizes of aluminium styles, and, although I have not yet found occasion to employ them, as I seldom resort, now, to this plan of treatment, there can be no doubt that they will answer an excellent purpose, the difference in weight being of still greater importance here than with the probes.

In this connection I cannot forbear to add a few words to what I have said heretofore as to the practicability and advantage of using the very largest probes of my series in treating the great majarity of nasal duct strictures. Upon this point I still find a great deal of scepticism, and, although I am frequently told by ophthalmic surgeons that they have been using my probes with much satisfaction, I usually find upon making the inquiry that they have not ventured to employ the largest

sizes. It is doubtless possible to cure many cases without doing this, but, as a rule, there can be no question that the cure is hastened, and the risk of a relapse greatly diminished. by the introduction of as large a probe as is practicable—*and this in at least two-thirds of the cases occurring in adults, means number 16.* In a series of thirty-four cured cases which I have reported in tabular form in an article upon "Affections of the Lachrymal Apparatus," contributed to Wood's Hand-Book of the Medical Sciences,[1] there are but thirteen cases in which a number 16 probe was not employed, and in seven of these number 15 was used. Of the remaining six cases, only one (in which number 13 was used) was in an adult. The other five cases, in which number 14 was used twice, number 13 twice, and number 12 once, occurred in children varying in age from four to sixteen years. To this list I can now add six additional cured cases, occurring in adults, in four of which number 16 was used, and in two number 15.

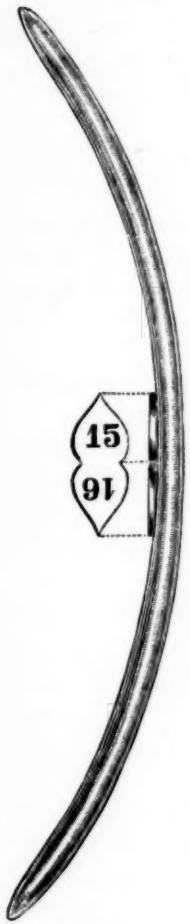

FIG. 6.

It is my practice now, in all cases, to use cocaine before probing the duct, and although this does not render the operation painless, it, at least, makes it much more tolerable. I have also thought that the pain caused by the presence of the probe in the duct, and by its withdrawal, is lessened by adding cocaine (10 per cent) to the vaseline with which the probe is annointed previous to its introduction.

As but few of the makers of surgical instruments seem to have a correct idea of the curve and the shape of the ends of my probes, and the cuts in their

1 Charles Willens & Co., 224 N. Howard St., Baltimore.
2 Vol. IV, p. 366

catalogues usually misrepresent these, I reproduce here a correct representation of the largest of the set,[1] numbers 15 and 16, the illustration being of the actual size of the probe.

KERATITIS BULLOSA.

BY DR. S. C. AYRES, CINCINNATI.

This rare form of corneal disease is seldom seen even by those who have the opportunity of observing large numbers of cases in hospital and private practice. Its diagnosis is not difficult, as its objective and subjective symptoms are very pronounced. It occurs not only in eyes which have been previously healthy, but in those which have suffered from trauma. It seems to be frequently associated with increased intra-ocular tension, but in the three cases which I report this was not the case. The peri-orbital neuralgia associated with this disease is frequently of a very severe type. The vesicle sometimes ruptures spontaneously, and then there is an intermission from pain until it reforms—showing that the stretching of the corneal nerves is the cause of the pain.

CASE I. Mr. J. E., 33, had his left eye injured about two and a half years ago by a nail, which he was driving. It struck the outer side of the cornea, producing a deep irregular wound followed by prolapse of the iris. The wound healed slowly, but the eye remained tender for a long time. The inner portion of the cornea is still transparent, and the iris can be seen drawn over to the scar on the outer side. For several months past the eye has been so sensitive as to interfere with his work at times, and recently he had to stop entirely. The outer half of the cornea is very sensitive to pressure, and presents a cicatrized appearance in the center of which is a point of pig-

1 Eight double probes (16 sizes) constitute the series. The smallest, number 1, has a diameter of one-fourth mm.; the largest number 16, a diameter of four mm. there being a difference of one-fourth mm. between the diameters of the succeeding numbers.

ment—probably the remnant of the incarcerated iris—the epithelium over the scar is raised in a bleb-like form, and is filled with transparent fluid.

The treatment in this case consisted in tearing off the raised epithelium and cauterizing the edges of the vesicle with carbolic acid. This latter was done by means of a stick dipped in pure carbolic acid, and the cauterization was limited to the periphery of the bleb. Then iodoform was dusted on the cornea. This operation had to be done four times before the vesicle ceased to form—but each time the vesicle was smaller. In a short time after his return home he was able to resume work again.

CASE II. Miss T. has a circumscribed infiltrated spot in the center of left cornea about 3 mm. in diameter. It has been affected for the past six months. The eye at times is painful, and is always quite sensitive to light. The lower portion of the cornea is vascular, and above it the epithelium is raised in a bleb-like form. The pupil dilates *ad max.* There is no history of trauma, and previous to the development of this trouble her eye had been very strong.

She had been treated by atropine and eserine, but all to no effect. I began the treatment as in the other case, by tearing away the raised epithelium and cauterizing the periphery of the bleb with carbolic acid. This seemed to have some beneficial effect, but it did not prevent the bleb from reforming. I made paracentesis corneæ, but this was rather disappointing in its result. The bleb reformed, although it was much smaller than at first. As the central portion of the cornea was in a necrotic state, I decided to remove it by scraping, and did so with excellent results. The scraping was done with a spud, and was always attended with considerable hæmorrhage from the cornea; the walls of the necrosed pit were treated with carbolic acid and then iodoform dusted on. Gradually the infiltrated cornea cleared, and the necrosed pit filled up until finally there was left only a dense saturated scar. This was tattooed very successfully.

CASE III. A delicate girl, aged 14, who was treated by my

partner, Dr. E. Williams. The vesicle was situated in the lower portion of the cornea, and measured about 3 mm. in diameter. The cornea was in other respects very healthy, there being no infiltration of the cornea behind the vesicle. The pupil dilated freely, showing that the iris was not implicated. She suffered from the severe orbital neuralgia always associated with this disease. The vesicle was torn off two or three times, and pressure bandage applied. Finding this did not promise a favorable result, as the vesicle always reformed in a few days, he touched the corneal surface with a stick of mitigated nitrate of silver. This accomplished a cure, but it left a small scar.

Kleinschmidt, Inaug. Dis. Bonn, 1876, reports two cases, one following an injury from powder explosion, and the other a severe keratitis.

Schmitz, Augenklinik, Cologne, 1874-75, reports one case following keratitis and accompanied with periodical ciliary neuralgia and photophobia.

Schiess, Gemuseus, klin. Monatsbl. f. Augenheilk, 1881, observed in an old lady, 81 years of age, numerous small shining vesicles on the cornea. They were finally relieved by pressure bandage.

Also Jahresbericht der Augenheilanstalt in Basel, January, 1883. One case where the vesicle was twice torn away and an iridectomy made, and where the yellow salve seemed to accomplish the cure.

MacKenzie, in the edition of 1855, speaks of dropsy of the cornea or chronic vesication of the cornea.

This rare form of corneal disease was first definitely described by Von. Graefe in 1855, in vol. 2 of *Graefe's Archives.* He states that in the first three years of his practice he had seen only one case. In the fourth year, among about five thousand patients, he had seen four persons so affected.

Weber, in vol. vii., *Graefe's Archives*, describes a case similar to Graefe's, except that there were five or six small blebs and one large one; but they were all filled with transparent fluid.

Cowell, in R. L. O. H. Reports, 1869, mentions four cases of vesicles of the cornea, in two of which there were vesicles on the skin also.

Pooley, in vol. iv., *Archives of Ophthalmology*, describes a very interesting case of keratitis vesiculosa which preceded an attack of glaucoma, which destroyed vision.

Brière, Ann. d'ocul. 70, p. 92, 1873, reports a case of keratitis bullosa associated with increased intra-ocular tension.

Landesberg, *Archiv. of Oph.* and *Otol.*, 1877, gives a detailed statement of seven cases which had come under his observation. In all of them there were increased intra-ocular tension. He characterizes the disease as "a deep and localized inflammation of a part of the cornea, with the tendency to acute exacerbation, of which the vesicle on the surface is only the last link of the chain of symptoms."

AN INTERESTING CASE OF TOBACCO AMBLYOPIA IN A LADY.

BY JULIAN. J. CHISOLM M. D., BALTIMORE, MD.

Mrs. A., æt. 40, consulted me for faulty vision which glasses would not relieve. About three months since she found reading beginning to be difficult. Knowing that she was approaching the age when spectacles would be required, she visited an optician and obtained a pair of convex glasses. These served her for a short time only, and then became useless. She made further efforts to obtain useful glasses, but without success. In the meantime her vision was becoming more foggy. It seemed to her that she was living in a smoky atmosphere. Everything was in a haze, whether she was looking at near or distant objects. Finding no glasses to aid her, at the suggestion of her physician she had come from her distant home to put herself under treatment. She was a handsome woman, whose dress, deportment and language indicated culture. I found her distant vision $^{15}/_{1x}$ each eye alike, which no glass improved. She could decipher slowly No.+10 of Jaeger's test types, but that would not permit her to read ordinary book print, which she could readily do three months ago. She had in a measure lost appreciation for colors, the red and green had assumed brown and gray tints and looked dull.

I examined her eyes thoroughly with the ophthalmoscope. I could find no disease in either of them. The fundus was perfect with clear media and with sharply outlined discs and vessels. I could detect no change in color at fovea nor of the optic disc. I was at a loss to account for the dull vision, as she seemed in every respect a perfectly healthy woman, and in response to her earnest inquiry told he so. After some conversation about the obscurity of her case, I ventured to say

that were she a man I would call her case one of tobacco poisoning. At this suggestion she laughed heartily, and then confessed that she did smoke a good deal. Naturally, I desired to know how one with her education and refinement had acquired so unusual a habit for ladies. Her history was soon told: "I married when quite young and went to live with my husband in North Carolina, where he had a very large farming interest. He owned so extensive a tract of land that neighbors were far away and I saw but little of them. I have had no children and during many loug winters my husband and myself have been the sole occupants of our country house. My husband had always been devoted to his pipe, which he takes up as soon as he gets into the house after overseeing his farm work. Often during our early months of married life he would call upon me to fill it for him, and at times would even dare me to light it. By degrees I found myself able to take several whiffs of tobacco smoke without discomfort. At his request I learned to smoke, as he said for companionship, and for many years I have taken my pipe with regularity." The cause of the amblyopia was now surely traced and the remedy was equally clear: Under advice she stopped promptly the use of tobacco and for two months used strychina in full doses,at the end of which time her sight was completely restored. The lady did not drink even wine. This was clearly a case of tobacco poisoning which had only commenced the annoying and which the abandonment of the use of tobacco promptly relieved.

I live in a tobacco growing country where the smoking of tobacco is nearly universal; not substitutes for tobacco, but the tobacco pure and unadulterated. Chewing is less common and snuff taking is the decided exception. Cases of amblyopia traceable clearly to tobacco I see frequently, and I have the gratification of knowing that sight is often restored if the habit of smoking be absolutely given up and stychina be used. I have never seen poisoning from the use of snuff; nor have I ever met with a case of tobacco amblyopia from chewing alone. I have never seen the sight affected under less than ten years use of the weed, in proof of the slowness of the poi-

soning. My youngest patient was only twenty-seven years of age, but he had been smoking since boyhood.

It is not always the amount of tobacco consumed which affects the nerves, although most patients acknowledge the abusive use of the article. Unfortunately for those who are enslaved by it, and who seek from its soothing influences, a solace when in mental trouble, the anxiety caused by the inability to read and the interference with literary work, finds more time and a greater desire for the pipe or cigar. This increase of smoking causes a still more rapid deterioration of vision. It is not every one abusively usiug tobacco who shows evidences of the poisoning. I know persons who have averaged from fifteen to twenty strong cigars in the twenty-four hours and who have kept this up for years without inconvenience. Others break down under a comparatively small amount, too little apparently to explain the effects. Usually from six to ten cigars are acknowledged, or a similar number of pipes. I have seen a case of tobacco amblyopia clearly traced to the use of one cigar a day, which strychnia in large doses could not relieve, and which disappeared promptly when this single cigar was given up. One unfortunate, when told that his impaired sight was due to tobacco poisoning, remarked that it was impossible, because he only smoked a half of a cigar a day (laying emphasis on the half). Naturally, I asked, why do you restrict yourself to a half cigar. The answer came that by the time he got half of a cigar smoked he would often feel so sick that he would have to lie down. For years he had been learning to smoke. Taunted by the gibes of his companions, he had determined to acquire the habit, cost what may, even if he had to take the nauseous dose in half cigars. With so good an excuse as the loss of sight was occasioning him, he willingly consented to abandon the attempt and his sight responded promptly to the withdrawal of the poison. In his case the susceptibility to the toxic effects of tobacco was an idiosyncrasy not often seen.

In the treatment of tobacco amblyopia, I always urge the immediate and absolute abandonment of tobacco in every form, no tapering off by diminishing the amount from day to

day. I then prescribe strychnia pushed to its full physiological effects .I never commence with less than $^1/_{20}$ of a grain taken three times a day and always after eating. I find this amount easily borne by adults. I administer it in pill form. I have often experimented by hypodermic injection and by the mouth. Giving alternate doses, under the skin, acts the more promptly, but not the more efficaciously. As the injection was often painful when frequently repeated I abandoned this mode of administering strychnia for the pill, the object being not sudden impressions, but permanent nerve stimulants. I find that by degrees the dose can be increased with benefit till $^1/_{10}$, $^1/_8$ or even $^1/_5$ grain three times a day can be taken and then kept up for weeks until the desired effect of retraced vision is obtained. If at any time muscular contractions are induced by the increase, the dose is diminished to the one previously taken with comfort. I have seen marked improvement in vision occur from an $^1/_8$ or $^1/_6$ of a grain which $^1/_{10}$ gr. three times a day did not bring about. In the administration of the $^1/_{20}$ grain granule three times a day to begin with, an additional pill of $^1/_{20}$ grain can readily be added every fifth day to the days dosing. The system acquires a tolerance of the increasing doses, till even $^1/_5$ of a grain or 4 pills of $^1/_{20}$ grain each at a dose after meals can be safely administered. I have never seen any injury from this heavy dosing nor even annoyance provided the increase be slow.

TRANSLATION.

FRIEDRICH HORNER—1831 TO 1886.

On the twentieth of December, 1886, an eminent representative of our profession died at Zuerich, whose labors in ophthalmic science and for the benefit of humanity were of high merit, and from whose pen the pages of this journal (*Monatsblaetter f. klin. Augenhlkde*) have often brought an interesting communication, or an original study.

He was one of the many young scholars who, coming from the school of Graefe, carried in all directions as an evangelium the more thorough investigation, the exacter examination and the more rational treatment taught by their master. They began their career emulating their master in industry and kindness, proud of the astonishing progress of their science, and everywhere they went, they brought with them a decidedly clearer knowledge of the diseases of the eye, and a higher faculty and better weapons to fight these ills.

Although most European [and a number of American, Translator] oculists were personal friends of the late Professor Horner, or at least knew him, the readers of this journal may like to have some further knowledge of the life of one who was taken from us too soon.

Friedrich Horner was born March 27, 1831, in Zuerich, the son of an able and honored physician. Though of poor health, the intelligent and highly talented boy visited the different schools of his native city and the gymnasium. Professor Hermann Sauppe, who at that time taught at the latter school, seems to have taken an especial liking to this pupil. When forty years later this teacher came as a delegate from the university of Goettingen to take part in the celebration of the fiftieth anniversary of the universityof Zuerich, he there found

his former pupil, Friedrich Horner, as a highly honored and eminent teacher.

In the spring of 1849 Horner matriculated at the Zuerich university. There Professor Ludwig, then teacher of anatomy and physiology in Zuerich, lastingly influenced him by his exact studies, and by the way in which he strictly severed the well ascertained from the doubtful.

Botanical excursions in company with Oswald Heer, who later on acquired world-wide renown, by the exercise in the air, exerted a favorable and permanent influence upon his health. Furthermore, it is likely that these studies in natural history influenced also the later career of the young man, since his high faculty of observation, a rapid and correct conception of what he had seen, became evident to the boy himself and to his father.

At that time fate dealt harshly with his family. His older and talented brother, Conrad, who devoted himself to the study of classical philology in Bonn, and who seemed to have a brilliant future before him, was attacked by heart-disease, came home and died a few months later, only twenty-two years of age. A month later his father had an apoplexy, when returning from a call to a patient and died the same evening, his last looks upon his now only son. But a few months later his mother fell ill, and near the end of the year she was buried, having given over to her relatives the care for the only son and his four younger sisters.

Thus the family was broken up and Friedrich Horner in his loneliness was stimulated the more to diligent and energetic studying.

He then went by way of Muenich and Regensburg to Vienna, where he listened with great interest to the teachings of Oppolzer, Skoda, and especially of Hebra whom he called an empiricist of the best kind. His dermatological studies at the Vienna school left their imprints on him, and later on the lasting influence of this school upon his observation of skin diseases could easily be recognized in his rational and accurate differentiation of diseases of the cornea. He also entered into

friendship in Vienna with a number of young men whose names later on were often heard of, as Dr. Schneller, of Danzig, Wilhelm von Zehender, and his intimate friend Wilhelm Hess, of Mainz.

The director of the ophthalmogical clinic at that time was Rosas, but the younger follower of ophthalmology met rather with Friedrich Jaeger at a smaller but valuable policlinic, where Edward Jaeger taught the technics of the ophthalmoscope.

At that time the young Berlin scholar began to be much talked about, and the more intrinsic studies of Graefe as well as the physiological labors of Von Helmholtz drew the eyes of all toward Berlin. The reports of Zehender and the admiration of Friedrich von Jaeger for his young Berlin pupil, in short, all things worked together to draw Horner to Berlin, which he reached the middle of October, 1854.

In Graefe's clinic, which in the absence of Graefe during the holidays was in the hands of Dr. Michaelis, Horner for the first time met his friend, Dr. Baenziger, and later on a number of later on well-known workers, with whom he became befriended, as Dr. A. Pagenstecher, Dr. von Troeltsch, Rothmund, of Muenich, Nussbaum, who was already known on account of his experiments with artificial glass corneæ, then Dr. A. Weber, of Darmstadt, and others.

Graefe returned in the early part of November, and Horner entered himself as his pupil. The inspiriting influence of the ingenious master, his taking personality decided the further course of Horner's life and career. On the 22nd of November, 1854, he was made policlinical assistant to Graefe, and thus his practice took up all his time, and procured him an immense experience in a scientific as well as in a practical direction.

Horner remained with Graefe until October, 1855, however, from May of that year in a freer position, since he had to spare himself on account of a severe attack of trachoma. There was so little difference between the age of the master and that of the pupil, that their intercourse from the beginning was that of colleagues, and, by the inspiration and the dili-

gence of the one and the recognition of the other, this soon ripened into an intimate friendship. The latter lasted unchanged until the death of the beloved teacher and friend. This would certainly have been impossible, had not Graefe found in his assistant the same noble, devoted and humane mind as his own, aside from his high talent and faculty for work.

All reports of this period, which was filled with all sorts of experiments, and in which so many questions were raised and so many of them answered correctly, state that the intercourse between Graefe and his followers was an extremely agreeable, almost intimate one. The young ophthalmologists not only met during the hours of teaching, but also every Thursday at Graefe's home, and during the week they had a regular meeting where a paper was read and discussed.

This time in Berlin was for Horner an extremely happy one and of important influence in shaping his future career.

Enthused by the ingenious master, his activity and his noble heart, Horner left Berlin and went to Paris. There he was attracted by Nélaton and Ricord, and especially by Desmarres, the father, who as Graefe's friend and assistant, received him warmly. Early in 1856 he returned to his native city and began there to practice his profession, and in May, 1856, he began to teach therapeutics at the university. He made his inaugural speech May 1, and his theme was the results of the ophthalmogical examinations upon the physiology and anatomy of the eye, further on he spoke of the macula lutea, papilla optica, transparency of the retina, blood-pressure, arterial and venous pulse, and he finished off with a few short remarks on the more recent understanding of the pathology of the eye.

September 7, 1857, a number of young physicians met with Graefe at Heidelberg, and founded the now well-known Heidelberg Ophthalmological Society. Von Arlt was present at nearly all their meetings. On September 12, the International Congress of Ophthalmologists met at Brussels. There Graefe read his celebrated paper on the influence of the iridectomy

in glaucoma. This paper was received with applause, and on their way home on the Rhine Hess and Horner helped to get it ready for print. In Mainz they separated, and thus Horner came back home in October, 1857, strengthened and refreshed, and felt as if drawn to and introduced into the ophthalmological science by an invincible, but friendly, hand.

In 1861, when Locher-Zwingli, the professor of both the surgical and the ophthalmic clinics, resigned, the faculty unanimously advised a separation of the two chairs, and the engagement of Billroth and Horner for them respectively. Billroth alone was chosen. When, however, during the following year Horner received a call to the university of Bern, he was given a clinical ward at the Canton's Hospital and the professorship. Thus a large field was opened for his activity, and he had reached a position which, worthy of his talents, gave him the opportunity for the most fruitful work with his eminent gifts and his complete technical knowledge.

Horner's work in our profession was in three directions. He was practitioner, teacher and investigator.

For the practice of his profession he possessed a rare combination of valuable peculiarities which may be shortly summed up in the following manner: the gift of critical observation, the penetrating mind, authority, technical ability and finally the good and humane heart which he had inherited from his noble family, but which had been considerably enlarged by the influence of the immortal master. These gifts of the practitioner coupled with a decided administrative talent enabled him to take care of his continually increasing practice. From far and near suffering patients in continually growing numbers came to him, to seek a cure or improvement, poor and rich, from the laborer up to the princes of the neighboring countries.

Twenty years ago he founded a large private asylum of his own, the Flattinger Hof, where one of Berthold Auerbach's stories (Brigitte) plays, whose author had himself stayed there for some time. Besides the security with which Horner operated, we have to mention especially the power with which he

subdued the most refractive patient, and, furthermore, the conscientiousness with which he studied every case in order to come to a diagnosis to found his treatment on.

Far from giving the patient empty words, when his examination had not led to a certain result, he simply and openly stated so to the patient, and surely his reputation was not hurt by that in any way.

The ophthalmologists have to thank Horner for a great deal, his teaching quality was eminent; without losing himself during the clinic in general descriptions, he always considered the case before him as such, and discussed with excellent perspicuity all its conditions, the etiology, diagnosis and treatment. Himself well educated in general medicine, he treated with predilection on the relations between eye-affections and general diseases. This faculty enabled him better than others to explain even to the novice such causal relations. None knew better than he how to grasp the existing symptoms, to deduce from them the nature of the lesion, and thus to find their deeper lying causes step by step. His free diction attracted the students and often inspired them for science. To hear Professor Horner was always a pleasure, an enjoyment and a gain. We must further admire the manner in which he knew, how to stimulate the interest of his students, how to introduce them into these special studies, and how he gave them subjects for their own examination and elaboration.

In his capacity as investigator he has in this journal published a great number of clinical observations, full of new facts, ingenious thoughts, and indications for the enrichment of our therapeutics, and which are as yet fresh in the minds of our readers.

To him, too, we owe a systematic treatise on the eye-affections of children (Gerhard's Lehrbuch der Kinder-Krankheiten, Tuebingen, 1882). This book is not finished, yet it has got so far, that the affections of the cornea, the *crux* of young physicians, are completely treated on, and in such a manner that whosoever will go to the trouble to study it thoroughly, will surely reap great pleasure from it in his practice.

A separate group of his works is formed by papers on hygiene, a subject he treated practically as well as theoretically. His labors in favor of the hygiene of schools and industries have been especially meritorious. Like other high-minded and broad-hearted men he has, as citizen, served his country in many ways and in different offices. We will only mention one of them: The foundation of the Children's Hospital in Zuerich in conjunction with his friend, Dr. Cramer of Mailand, who made the first donation to this humane institution.

His worth as a colleague and a friend is best known to those who for so many years have met with him regularly in the Heidelberg Ophthalmological Society, and who have spent valuable moment with him in the circle of friends. Alas, that it was not ordained, that he should be able to enjoy a few years of rest after so much of hard work. Just at the time when his two children came to be of the proper age to enjoy most their father's mind, sickness, and with it sorrow and pain, came on. During the year 1885 he grew weaker, and at the Heidelberg meeting all his friends noticed with anxiety how laborious his breathing had become; yet the scholar's mind was as yet fresh. While speaking at that meeting he was already suffering from an exudation into the pleura, which had not yet been diagnosed, due to disease of the kidneys and blood-vessels, and which soon grew worse, and endangered the existence of our friend during the following winter. Next spring he somewhat improved, and after he had spent the summer at the beautiful Interlaken, his strength returned to such an extent, that he could think of returning to his professional studies, and actually did so. He had hopes of a new lease of life, and enjoyed daily that it was again given him to work with success. Just when all were apt to forget the danger, the catastrophe came. On December 15, 1886, in the evening, while he was surrounded by his family and in lively conversation, an apoplexy of the brain overtook him. He diagnosed himself the hemiplegia, and knew its cause at once. Well knowing, that he would not for a much longer time have thoughts and words at his disposal, he made use of the re-

maining time to say good-bye to his family in warm words and to express his last will. Then aphasia came on and later on unconsciousness, and on the twentieth of December, in the forenoon, this life, so rich, came to an end. A large number of mourners followed his funeral. Thousands near and far, in in mind at least, were present at this ceremony, for not Zuerich alone and Switzerland, but the civilized world, science and humanity, had lost one of their noblest representatives (Dr. M. DUFOUR, in *Zehender's Mtsbltter f. Augenhlk*).

CORRESPONDENCE.

A QUESTION IN PROFESSIONAL ETHICS.

SALEM, MASS., March 3, 1887.

To what extent does the vending of glasses by oculists and the receiving of commissions from opticians "advance ophthalmic science and art?" It is generally considered reprehensible of general practitioners, who live where there are competent apothecaries, to sell medicines to their patients, and the same may be said if they accept any allowance from the apothecaries who prepare their prescriptions—although this pernicious practice is, doubtless, much indulged in. Now as to oculists.

Quite recently the writer received the following proposition from an optician in Boston: "We beg leave to state that you are entitled to 20 per cent. of the gross amount of all business you may wish to throw in our way, and this is payable monthly."

The same party said to him—*sub rosa*—that a rising oculist offered him a moiety of all first, and also of all subsequent fees, received from patient's sent from his shop—which, assuredly, was a liberal offer. He further stated that another gentleman referred his patients to him, with the formulæ for glasses, but with the understanding that they were not to settle with the optician for them, but that they should do this on returning to the oculist.

In the matter of cylindric glasses, it would be easy to prove that it is by no means unusual, for ophthalmic surgeons of good standing (members even of the American Ophthalmological Society) to provide their patients with cylinder-glasses in consideration of $10 to $15.

Now the question arises, is it in good form for members of a society that enjoys so enviable a reputation as does the American Ophthalmologist to trade in glasses?

To the beginner, the temptation to resplenish his purse with shekels by this sort of dickering may be hard to resist.

But, if yielded to, does he not surely descend towards the plane of the ubiquitous, itinerant, spectacle-selling "doctor," whose dicta, tediously repeated by his dupes, are not unfamiliar in our consulting rooms.

It is all in a nutshell. Two roads are before him—*facilis est descensus averni* and *noblesse oblige.* D. COGGIN.

BOSTON, March 10, 1887.

TO THE EDITOR:—In looking over Dr. Burnett's interesting and suggestive paper in the AMERICAN JOURNAL OF OPHTHALMOLOGY for January, 1887, I learn that M. Sous in his Traité d' Optique, Paris, 1881, doubts that by rotating a cylinder-lens about its cyl. axis we increase its refractive power. It would seem that the author could hardly have tried the experiment practically. However, in turning to the passage of his book in which the subject is referred to, it may be noticed that in the "demonstration" it is assumed that a ray parallel to the principal axis of a bi-convex lens and meeting the lens near its extreme periphery is refracted so as to pass through the principal focus of the lens; which assumption is inadmissible, as we know that of rays parallel to the principal axis only those quite near to it pass through the principal focus. Of course, the "demonstration" is invalid. Probably, by this time the author has noticed the lapsus. Yours truly,

G. HAY.

EDITORIAL NOTICE.

THE INTERNATIONAL MEDICAL CONGRESS.

The following communication has just been issued by the president of the Section of Ophthalmology, and we hasten to bring it to the knowledge of our readers asking them at the same time to prepare papers for the occasion. These papers need not be confined to the topics mentioned below.—[Ed.

Washington, D. C., Sept. 5, 1886.

My Dear Doctor—A very large delegation of the most conspicuous members of the medical profession from Europe will honor the International Medical Congress by their presence, and will take an active part in the proceedings. It is very much to be desired that the leading physicians of the United States should be present in force to welcome their colleagues from the old world, and also give them evidences, by the reading of papers, and by the discussion of subjects, that the various departments of medicine in this country are fully up to the European standard. You are cordially invited to become a member of the Section on Ophthalmology, and to prepare a paper to be used before the section. The meeting of the congress will not exceed five days. It promises to be one to be remembered by participants on account of the interests and pleasures of the meeting.

It will give me much pleasure to hear from you at an early date, with a notice of the subject of your paper.

Yours very truly,

Julian J. Chisolm.

President of the Section of Ophthalmology.

EXTRACT FROM THE RULES OF THE CONGRESS.—Those who desire to present papers before the Section must advise the Secretaries by May 1, and furnish brief abstracts of their papers before June 1.

"No member shall be allowed to speak for more than ten minutes, with the exception of readers of papers and those who may introduce subjects for discussion, who may each occupy twenty minutes."

Those who intend to be present at the sessions of the Section, and especially those who desire to take part in the discussions, will confer a favor by communicating with the President and Secretaries, who will be further gratified at receiving suggestions as to the work of the Section.

JULIAN J. CHISOLM, M.D.,
President of the Section.

Residence, 114 West Franklin St., Baltimore, Md.

Secretaries: Adolf Alt, M.D., 1519 Washington Ave., St Louis, Mo.; Jos. A. White, M.D., 410 East Grace St., Richmond, Va.

NINTH INTERNATIONAL MEDICAL CONGRESS, WASHINGTON, September 5, 1887.—Section on Ophthalmology.—Scheme of Subjects for papers or for Discussion.

1. Antisepsis in Eye Surgery. How is it to be carried out? What part do microbes play in the development of eye diseases?

2. What are the advantages of very hot over very cold applications in the treatment of acute inflammations of the eye?

3. What are the reflex diseases of the eye, and the distant sources of irritation?

4. Is sight restored in tobacco amblyopia solely by stopping the use of tobacco, or by the administration of strychnia?

5. What part does malarial poisoning play in the developmsnt of eye diseases?

6. Is strabismus really dependent upon the refractive condition of the eye, or is it mainly a muscular defect coincident with certain anomalies of refraction? At how early an age should strabismus be corrected by operation? The advancement of Tenon's capsule.—What are its permanent effects?

7. The relative value of retinoscopy in the diagnosis of refraction cases? In the adjustment of glasses should the whole error of refraction, as revealed by atropia, be corrected; Do not the slight forms of astigmatism, one quarter of a dioptric, often cause as much annoyance, as do the higher grades, and do they not equally demand correction by cylinders?

8. The uses of the cautery in arresting progressive ulcerations of the cornea.

9. The value of eserine drops in checking the progress of glaucoma?

10. Has Jequirity solved the problem of trachoma? Does the crushing of trachomatous granules by pressure or scraping promise an advance in treatment over the sulphate of copper crystal?

11. What is the best method of operating for entropion?

12. Is abscision in staphyloma an operation scientifically established? What are the advantages of evisceration over extirpation of the eye-ball? Does optico-ciliary neurotomy sustain its position as a good substitute for enucleation? Is it safer to enucleate or to eviscerate panophthalmitic eyes? Conservative treatment of severe wounds of the eye-ball. Will iridectomy be abandoned in cataract extractions?

13. Under antisepsis can unripe cataracts, sufficiently advanced to destroy useful vision, be safely extracted? Is the introduction of antiseptic liquids into the anterior chamber, after cataract operations, a safe and useful procedure? What is the best method of caring for patients after cataract extractions? Can the eye not operated upon, in cataract and iridectomy cases, be left open with safety for the comfort of the

patient? Is the restraining treatment usually enforced after eye operations necessary?

14. How is detachment of the retina best cured?

Papers relating to topics not in this list will be equally received as a part of the work of the Section.